

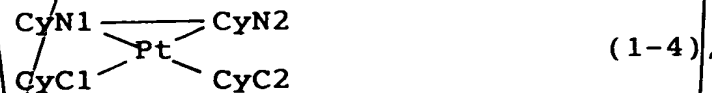
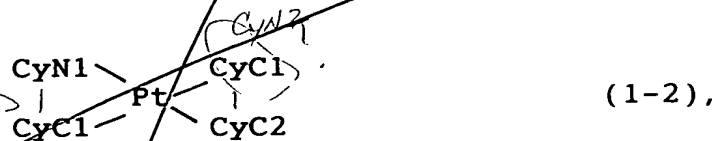
WHAT IS CLAIMED IS:

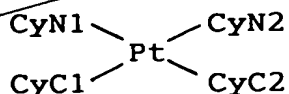
1. A luminescence device, comprising: an organic compound layer comprising a metal coordination compound having a partial structure represented by the following formula (1):



wherein each of N and C represents an atom constituting a cyclic group.

2. A device according to Claim 1, wherein the metal coordination compound is represented by any one of the following formulas (1-1) to (1-6):





(1-6),

wherein CyN1 and CyN2 independently denote a cyclic  
group containing a nitrogen atom connected to Pt and  
capable of having a substituent, and CyC1 and CyC2  
independently denote a cyclic group containing a  
carbon atom connected to Pt and capable of having a  
substituent, each of the substituents for CyN1, CyN2,  
CyC1 and CyC2 being selected from the group consisting  
of a halogen atom; nitro group; a trialkylsilyl group  
containing three linear or branched alkyl groups each  
independently having 1 - 8 carbon atoms; and a linear  
or branched alkyl group having 1 - 20 carbon atoms  
capable of including one or at least two non-  
neighboring methylene groups which can be replaced  
with -O-, -S-, -CO-, -CO-O-, -O-CO-, -CH=CH- or -C≡C-  
and capable of including a hydrogen atom which can be  
replaced with a fluorine atom.

3. A device according to Claim 2, wherein the  
metal coordination compound is represented by the  
formula (1-1) or the formula (1-2).

4. A device according to Claim 2, wherein at  
least one of CyN1 and CyN2 in the formulas (1-1) to  
(1-6) is a substituted or unsubstituted cyclic group

having a ring structure selected from the group consisting of pyridine, pyrimidine, pyrazoline, pyrrole, pyrazole, quinoline, isoquinoline, and quinoxaline.

5

5. A device according to Claim 2, wherein at least one of CyC1 and CyC2 in the formulas (1-1 to (1-6) is a substituted or unsubstituted cyclic group selected from the group consisting of phenyl, naphthyl, thienyl, benzothienyl, and quinolyl.

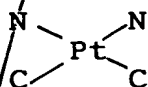
10

6. A device according to Claim 1, further comprising a pair of electrodes oppositely disposed to sandwich the organic compound layer, wherein a voltage is applied between the pair of electrodes to cause luminescence.

15

7. A metal coordination compound, adapted for use in a luminescence device, having a partial structure represented by the following formula (1):

20



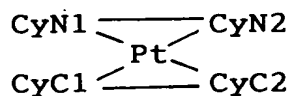
(1),

wherein each of N and C represents an atom constituting a cyclic group.

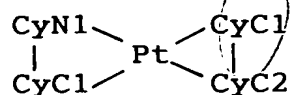
25

8. A compound according to Claim 7, which is represented by any one of the following formulas (1-1)

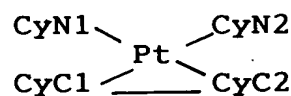
to (1-6):



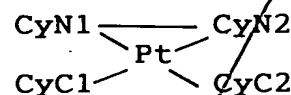
(1-1),



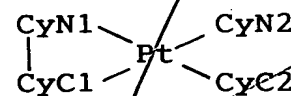
(1-2),



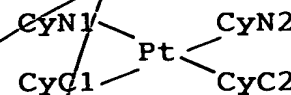
(1-3),



(1-4),



(1-5),



(1-6),

wherein CyN1 and CyN2 independently denote a cyclic group containing a nitrogen atom connected to Pt and capable of having a substituent, and CyC1 and CyC2 independently denote a cyclic group containing a carbon atom connected to Pt and capable of having a substituent, each of the substituents for CyN1, CyN2, CyC1 and CyC2 being selected from the group consisting of a halogen atom; nitro group; a trialkylsilyl group

containing three linear or branched alkyl groups each independently having 1 - 8 carbon atoms; and a linear or branched alkyl group having 1 - 20 carbon atoms capable of including one or at least two non-  
5 neighboring methylene groups which can be replaced with -O-, -S-, -CO-, -CO-O-, -O-CO-, -CH=CH- or -C≡C- and capable of including a hydrogen atom which can be replaced with a fluorine atom.

10 9. A compound according to Claim 8, which is represented by the formula (1-1) or the formula (1-2).

15 10. A compound according to Claim 8, wherein at least one of CyN1 and CyN2 in the formulas (1-1) to (1-6) is a substituted or unsubstituted cyclic group having a ring structure selected from the group consisting of pyridine, pyrimidine, pyrazoline,  
pyrrole, pyrazole, quinoline, isoquinoline, and quinoxaline.  
*Handwritten notes: 5/1N, 6/2N, 5/2N, 6/1N/8/2N, 6/1N/8/2N, 6/2N/8/2N*

20 11. A compound according to Claim 8, wherein at least one of CyC1 and CyC2 in the formulas (1-1 to (1-6) is a substituted or unsubstituted cyclic group selected from the group consisting of phenyl,  
25 naphthyl, thienyl, benzothienyl, and quinolyl.

090430 090401